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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,870	10/22/2003	Michael J. Wookey	30014200-1120	6814

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EXAMINER	
PHAM, MICHAEL	

ART UNIT	PAPER NUMBER
2167	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/690,870	WOOKEY, MICHAEL J.	
	Examiner	Art Unit	
	Michael D. Pham	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-7,and 9-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-7,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/8/07 has been entered.

Status of claims

2. Claims 1-3, 5-7, 9-10 are pending.

3. Claims 1-3, 5-7, 9-10 have been examined.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: tangible computer readable medium is not within the specifications.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 5-7 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility states, page 51:

When nonfunctional descriptive material is recorded on some computer-readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

The claims fail to place the invention squarely within one statutory class of invention. On paragraph 0074 of the U.S. Patent application publication 20040230982 (patent office publication of applicant's specifications), applicant has provided evidence that applicant intends the "medium" to include carrier waves. Carrier waves are not physical articles or objects and/or items which would not be structurally and functionally interconnected to the software. As such, the claim is drawn to a form of energy. Energy is not one of the four categories of invention and therefore this claim(s) is/are not statutory. Energy is not a series of steps or acts and thus is not a

process. Energy is not a physical article or object and as such is not a machine or manufacture. Energy is not a combination of substances and is therefor not a composition of matter.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-3, 5-7, and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0095399 by Devine et. al (hereafter Devine), and further in view of U.S. Patent Application Publication 2003/0115291 by Kendall et. al. (hereafter Kendall).

Claim 1:

Devine discloses the following claimed limitations:

"providing a plurality of in-memory processing engines" [0055, connected devices provide data processing. That is, plurality of processing engines.] ", each processing engine subscribing to at least one of a plurality of datatypes and capable of publishing at least one of the datatypes" [Devine, 0055, Connected devices are able to subscribe and publish information.] ", at least one of the processing engines subscribing to at least one of the datatypes published by another of the processing engines," [0055, connected devices may act as clients with respect to

services hosted by publishers. That is, a subscriber subscribes to a publisher.] "the processing engines initiating processing responsive to receipt of a subscribed to datatype" [0055, connected devices may act as clients capable of receiving and optionally modifying reports that they receive from publishers. That is, the connected device can receive as well as respond to (i.e. by modifiying) the subscribed datatype received from publisher.]; and

However Devine does not explicitly disclose

"determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and"

"a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype".

On the other hand, Kendall discloses,

"determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and" [abstract, a subscribing selector server receives data published by the data repository (e.g. a first processing engine subscribing to and receiving a first data type), filters the published data in accordance with filtering criteria defined on the selector server

(e.g. performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype)]

"a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype" [0083, a first trade repository data is fed to a first selector server 24, which in turn passes data to a daisy chained second selector server 25. This in turn communicates via a wide area network 26 with a third daisy chained selector server 27 (e.g. a second processing engine subscribing to and receiving the second datatype). 0005, selector servers can filter and combine data (e.g. performing a second processing on the processed data associated with the second data type to determine the solution to the problem) to produce customized output (e.g. and publishing the solution as a third datatype)].

Devine and Kendall are both related to publish and subscribing systems. Hence are within a the same field of endeavor. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply Kendall's disclosure of subscribing to one processing engine to another to produce a result as shown above to Devine's system in order to provide fine selections without having to requery repositories [0080]. Thereby improving the cost of data retrieval.

Claim 2:

Devine discloses, "modifying one of the first and second processing engines, wherein the

determining of the solution is not interrupted by the modification." [0058, system software upgrades and maintenance to connected devices (i.e. modifying one of the processing engines).]

Claim 3:

Devine discloses, "deploying a new processing engine, wherein the determining of the solution is not interrupted by the modification." [0057, deploying a back up workstation (i.e. new processing engine) when failure or loss of power occurs to the publisher.].

Claim 5:

Devine discloses the following claimed limitations:

"providing a plurality of in-memory processing engines" [0055, connected devices provide data processing. That is, plurality of processing engines.] ", each processing engine subscribing to at least one of a plurality of datatypes and capable of publishing at least one of the datatypes" [Devine, 0055, Connected devices are able to subscribe and publish information.] ", at least one of the processing engines subscribing to at least one of the datatypes published by another of the processing engines, the processing engines initiating processing responsive to receipt of a subscribed to datatype;" [0055, connected devices may act as clients capable of receiving and optionally modifying reports that they receive from publishers. That is, the connected device can receive as well as respond to (i.e. by modifying) the subscribed datatype received from publisher.].

determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and

a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype

However Devine does not explicitly disclose

"determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and"

"a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype".

On the other hand, Kendall discloses,

"determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and" [abstract, a subscribing selector server receives data published by the data repository (e.g. a first processing engine subscribing to and receiving a first data

type), filters the published data in accordance with filtering criteria defined on the selector server (e.g. performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype)]

"a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype" [0083, a first trade repository data is fed to a first selector server 24, which in turn passes data to a daisy chained second selector server 25. This in turn communicates via a wide area network 26 with a third daisy chained selector server 27 (e.g. a second processing engine subscribing to and receiving the second datatype). 0005, selector servers can filter and combine data (e.g. performing a second processing on the processed data associated with the second data type to determine the solution to the problem) to produce customized output (e.g. and publishing the solution as a third datatype)].

Devine and Kendall are both related to publish and subscribing systems. Hence are within a the same field of endeavor. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply Kendall's disclosure of subscribing to one processing engine to another to produce a result as shown above to Devine's system in order to provide fine selections without having to requery repositories [0080]. Thereby improving the cost of data retrieval.

Claim 6:

Devine discloses "modifying one of the first and second processing engines, wherein the determining of the solution is not interrupted by the modification" [0058, system software upgrades and maintenance to connected devices (i.e. modifying one of the processing engines).].

Claim 7:

Devine discloses "deploying a new processing engine, wherein the determining of the solution is not interrupted by the modification" [0057, deploying a back up workstation (i.e. new processing engine) when failure or loss of power occurs to the publisher.].

Claim 9:

Devine discloses the following claimed limitations:

"a memory having a program that provides a plurality of in-memory processing engines" [0055, connected devices provide data processing. That is, plurality of processing engines.] ", each processing engine subscribing to at least one of a plurality of datatypes and capable of publishing at least one of the datatypes" [Devine, 0055, Connected devices are able to subscribe and publish information.] ", at least one of the processing engines subscribing to at least one of the datatypes published by another of the processing engines" [0055, connected devices may act as clients capable of receiving and optionally modifying reports that they receive from publishers. That is, the connected device can receive as well as respond to (i.e. by modifying) the subscribed datatype received from publisher.] ", the processing engines initiating processing responsive to receipt of a subscribed to datatype," [0055, connected devices may act as clients

capable of receiving and optionally modifying reports that they receive from publishers. That is, the connected device can receive as well as respond to (i.e. by modifying) the subscribed datatype received from publisher.] and

"a processing unit that runs the program" [Abstract, program execution].

However, Devine does not explicitly disclose

"determines a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and

a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype."

On the other hand, Kendall discloses,

"determines a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and" [abstract, a subscribing selector server receives data published by the data repository (e.g. a first processing engine subscribing to and receiving a first data type), filters the published data in accordance with filtering criteria defined on the selector server

(e.g. performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype)]

"a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype" [0083, a first trade repository data is fed to a first selector server 24, which in turn passes data to a daisy chained second selector server 25. This in turn communicates via a wide area network 26 with a third daisy chained selector server 27 (e.g. a second processing engine subscribing to and receiving the second datatype). 0005, selector servers can filter and combine data (e.g. performing a second processing on the processed data associated with the second data type to determine the solution to the problem) to produce customized output (e.g. and publishing the solution as a third datatype)].

Devine and Kendall are both related to publish and subscribing systems. Hence are within a the same field of endeavor. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply Kendall's disclosure of subscribing to one processing engine to another to produce a result as shown above to Devine's system in order to provide fine selections without having to requery repositories [0080]. Thereby improving the cost of data retrieval.

Claim 10:

Devine discloses the following claimed limitations:

"means for providing a plurality of in-memory processing engines" [0055, connected devices provide data processing. That is, plurality of processing engines.] ", each processing engine subscribing to at least one of a plurality of datatypes and capable of publishing at least one of the datatypes" [Devine, 0055, Connected devices are able to subscribe and publish information.] ", at least one of the processing engines subscribing to at least one of the datatypes published by another of the processing engines, the processing engines initiating processing responsive to receipt of a subscribed to datatype" [0055, connected devices may act as clients capable of receiving and optionally modifying reports that they receive from publishers. That is, the connected device can receive as well as respond to (i.e. by modifying) the subscribed datatype received from publisher.].

However, Devine does not explicitly disclose,

"means for determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and

a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype".

On the other hand, Kendall discloses,

"means for determining a solution to a problem by

a first processing engine subscribing to and receiving a first datatype, performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype, and" [abstract, a subscribing selector server receives data published by the data repository (e.g. a first processing engine subscribing to and receiving a first data type), filters the published data in accordance with filtering criteria defined on the selector server (e.g. performing a first processing on a data associated with the first datatype, and publishing a first processing result as a second datatype)]

"a second processing engine subscribing to and receiving the second datatype, performing a second processing on the processed data associated with the second datatype to determine the solution to the problem, and publishing the solution as a third datatype" [0083, a first trade repository data is fed to a first selector server 24, which in turn passes data to a daisy chained second selector server 25. This in turn communicates via a wide area network 26 with a third daisy chained selector server 27 (e.g. a second processing engine subscribing to and receiving the second datatype). 0005, selector servers can filter and combine data (e.g. performing a second processing on the processed data associated with the second data type to determine the solution to the problem) to produce customized output (e.g. and publishing the solution as a third datatype)].

Devine and Kendall are both related to publish and subscribing systems. Hence are within a the same field of endeavor. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to apply Kendall's disclosure of subscribing to one processing engine to another to produce a result as shown above to Devine's system in order to provide fine

selections without having to requery repositories [0080]. Thereby improving the cost of data retrieval.

Response to Arguments

9. Applicant's arguments with respect to claims 1-3, 5-7, 9-10 have been considered but are moot in view of the new ground(s) of rejection.

Note: In future responses, when making amendments and/or arguments please provide citations of support from applicant's specification.

Conclusion

10. The prior art made of record listed on PTO-892 and not relied, if any, upon is considered pertinent to applicant's disclosure.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Pham whose telephone number is (571)272-3924. The examiner can normally be reached on Monday - Friday 9am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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